

# Service Manual

## AUTOMOTIVE MULTI-MEDIA



### MAZDA CA-DM1390F

MD Display of MASIC

PART No. : N069 79 BC0

VEHICLE : General

DESTINATION : North America

PRODUCED AFTER : Sept., 2003

### Specifications\*

#### General

Power Supply	DC 12V (11V - 16V)
	Test Voltage 13.2V
	Negative Ground
Current Consumption	Less than 1A ( Illumination ON )

Dimensions\*\* (W×H×D) 109.5 × 40 × 20.7 (mm)

Weight\*\* 80g

\* Specifications and the design are subject to possible modification without notice due to improvements.

\*\* Dimensions and Weight shown are approximate.

! Above specifications comply with EIA standards

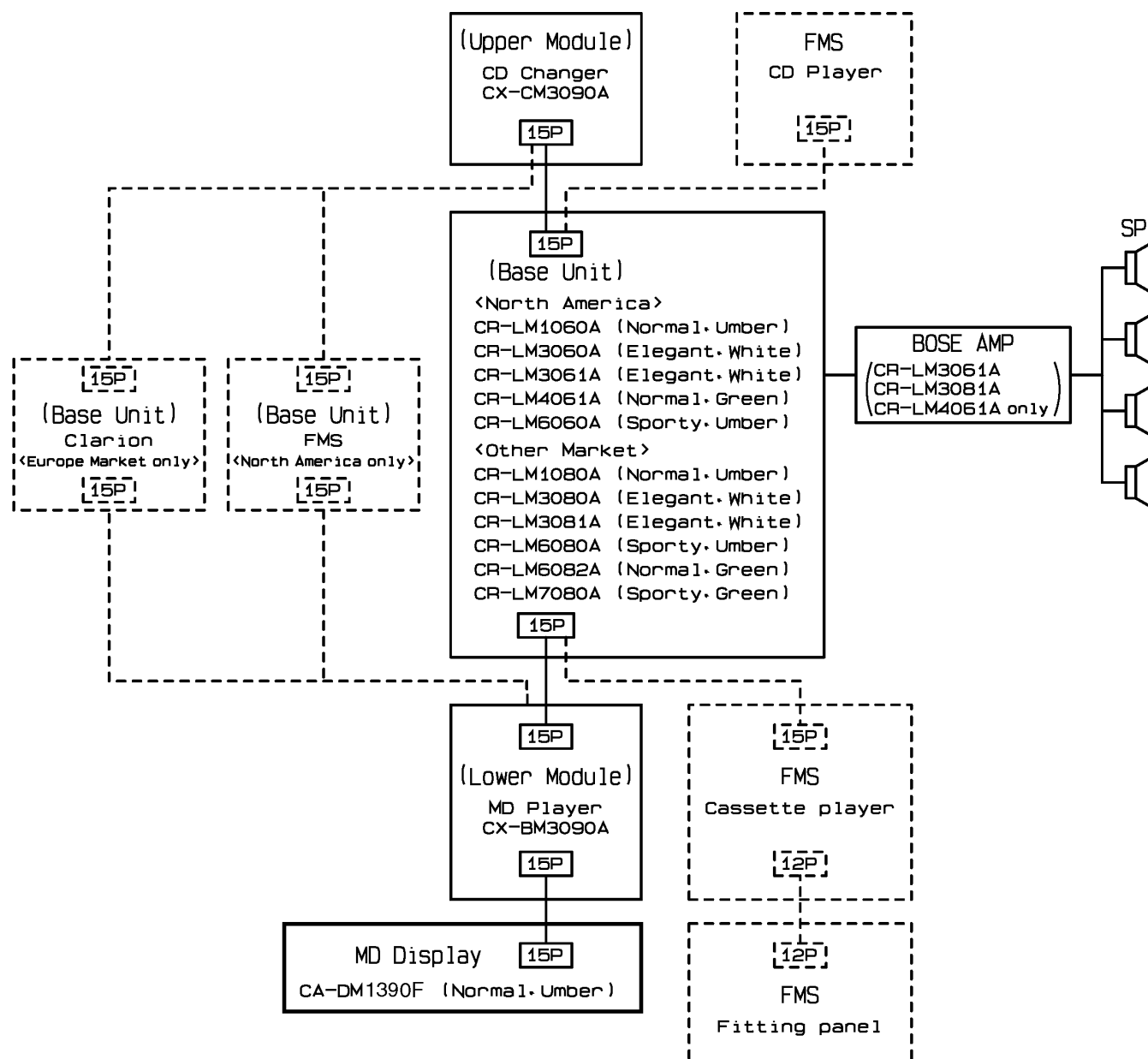
# CONTENTS

	Page		Page
1 FEATUERS .....	2	5 REPLACEMENT PARTS LIST .....	4
2 SYSTEM BLOCK DIAGRAM .....	2	6 EXPLODED VIEW (Unit) .....	5
3 NAME OF FUNCTION OF EACH PARTS .....	3	7 WIRING DIAGRAM .....	6
4 TERMINALS DESCRIPTION .....	3	8 SCHEMATIC DIAGRAM .....	7

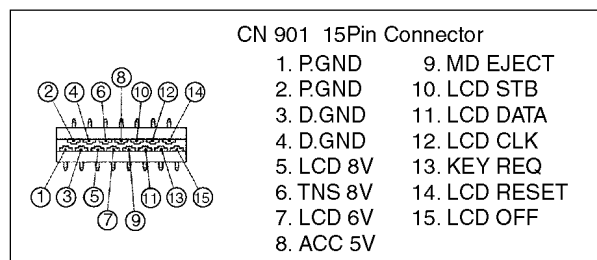
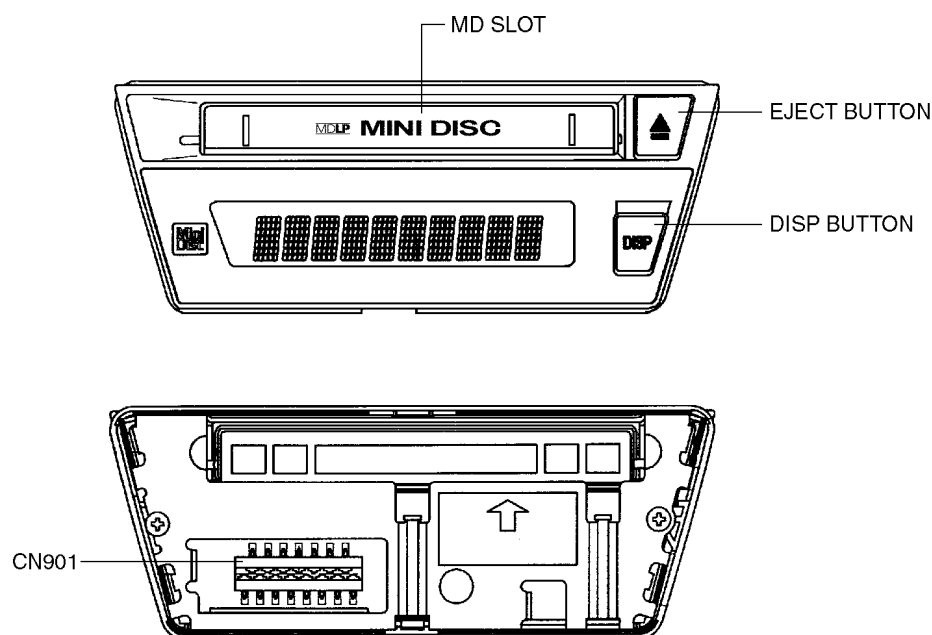
## 1 FEATUERS

- MD Display of MASIC
- Dot Matrix LCD

## 2 SYSTEM BLOCK DIAGRAM



### 3 NAME OF FUNCTION OF EACH PARTS



### 4 TERMINALS DESCRIPTION

IC901 : YEAMPD32B015

Pin No.	Name	Description	I/O	Vol. (V)
1	LED1 (NC)	No Connection	-	-
2	LED2 (NC)	No Connection	-	-
3	LED3 (NC)	No Connection	-	-
4	LED4 (NC)	No Connection	-	-
5	VSS	(Connecting to Ground)	-	0
6	VLC5	LCD Control Voltage5	-	0
7	VLC4	LCD Control Voltage4	-	1.5
8	VLC3	LCD Control Voltage3	-	3.0
9	VLC2	LCD Control Voltage2	-	3.0
10	VLC1	LCD Control Voltage1	-	4.5
11	VLC0	LCD Control Voltage0	-	6.0
12	VDD	(Connecting to +5V)	-	5.0
13	SYNC	Synchronize Input	-	5.0
14	LCD OFF	LCD Control (LCD Off)	I	5.0
15	RESET	Reset	I	5.0
16	KEY REQ	Key Request Output	O	0
17	SCK	Shift Control Clock Input	I	0
18	DATA	Data In/Out	I/O	5.0

Pin No.	Name	Description	I/O	Vol. (V)
19	STB	Strobe Input	I	0
20	OSC IN	Oscillator Input	I	2.5
21	OSC OUT	Oscillator Output	O	2.5
22	KEY1 (NC)	No Connection	-	-
23	KEY2 (NC)	No Connection	-	-
24	KEY3 (NC)	No Connection	-	-
25	KEY4	Key Scan Input	I	0.9
26-33	SEG1/KS1 - SEG8/KS8	Segment/Key Scan Output	O	3.0
34-75	SEG9 - SEG50	Segment Output	O	3.0
76-85	SEG51 - SEG60 (NC)	No Connection	-	-
86-90	SEG1/COM14 - SEG5/COM10 (NC)	No Connection	-	-
91,92	COM9, COM8 (NC)	No Connection	-	-
93-99	COM7 - COM1	Common 7-1	O	3.0
100	COM0 (NC)	No Connection	-	-

# 5 REPLACEMENT PARTS LIST

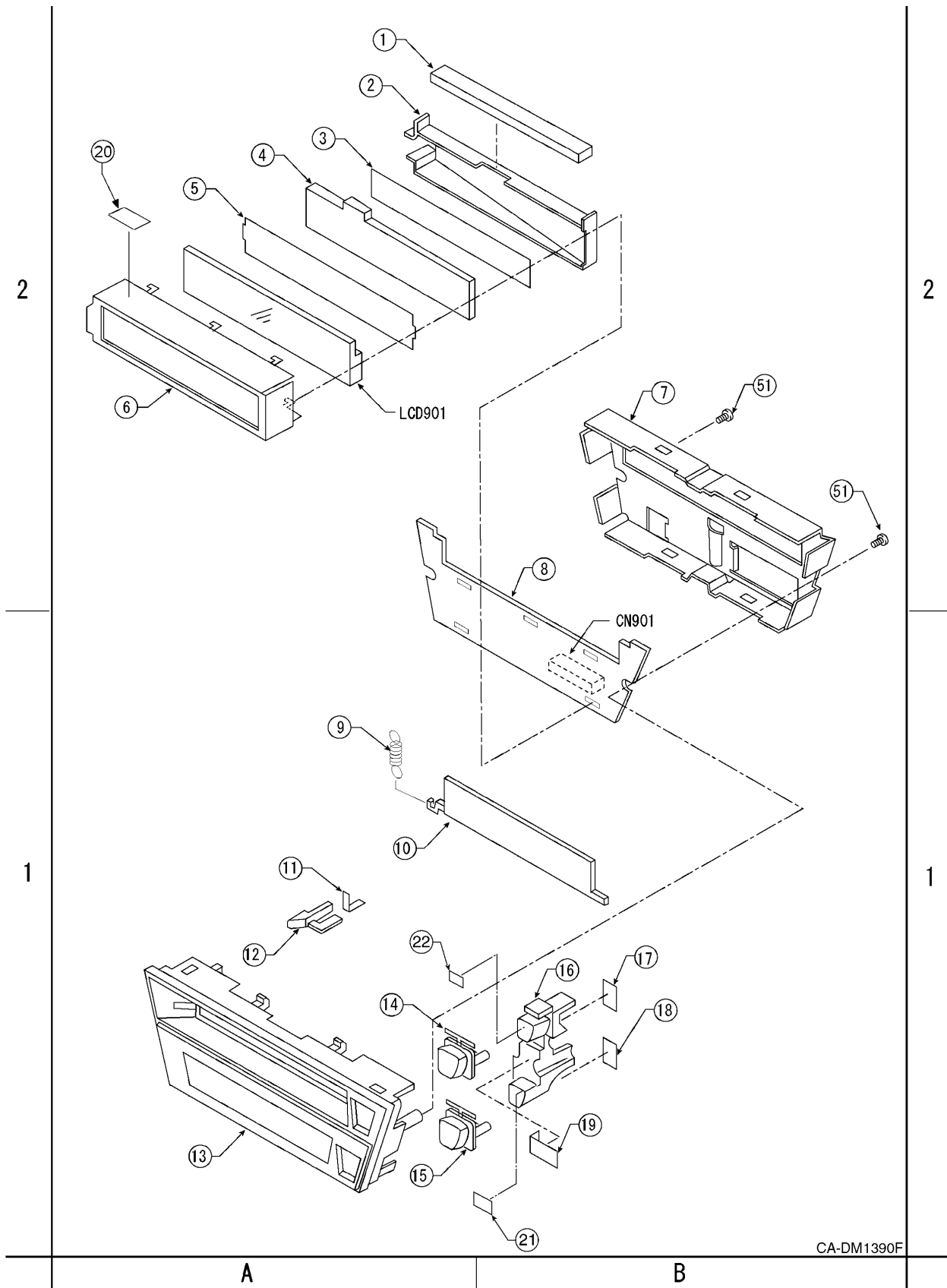
Notes :

1. Be sure to make your orders of replacement parts according to this list.
2. Important safety notice: Components, identified by  $\Delta$  mark have special characteristics important for safety. When replacing any of these components, use only manufacturer's specified parts.
3. Location keys in the remarks column indicates the general location of the parts shown in the exploded drawing, as in a road map.
4. The marking (RTL) indicates that Retention Time is limited for this item. After the discontinuation of assembly in production, the item will continue to be available for a specific period of time. The retention period of availability is dependent on the type of assembly, and in accordance with the laws governing part and product retention. After the end of this period, the assembly will no longer be available.

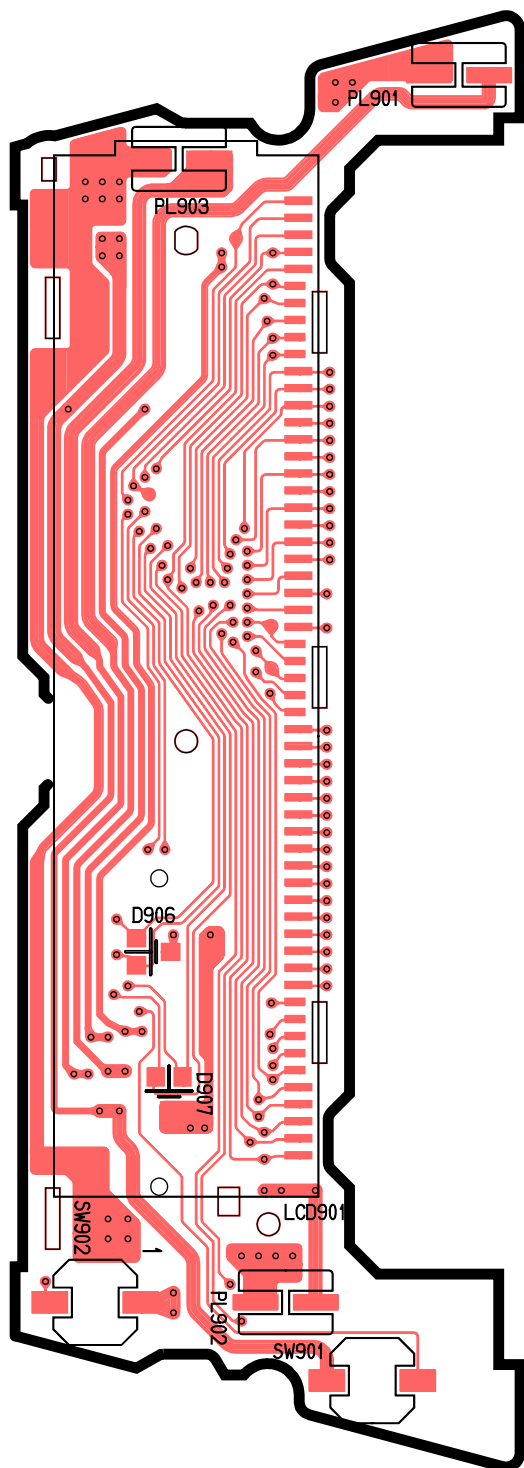
Ref. No.	Part No.	Part Name & Description	Remarks
[E8901A] Display Block			
IC			
IC901	YEAMPD32B015	IC	
DIODES			
D901	MA8100LMTX	Diode	
D902	YEAD1SS355T1	Diode	
D903	MA8100LMTX	Diode	
CAPACITOR			
C901	FLJ1H103A513	Ceramic, 0.01pF 50WV	
RESISTORS			
R901	ERJ6GEYJ224	Chip, 220k $\Omega$ 1/10W	
R903	ERJ6GEYJ103	Chip, 10k $\Omega$ 1/10W	
R904	ERJ6GEYJ103	Chip, 10k $\Omega$ 1/10W	
R905	ERJ6GEYJ472	Chip, 4.7k $\Omega$ 1/10W	
R906	ERJ6GEYJ472	Chip, 4.7k $\Omega$ 1/10W	
R908	ERJ6GEYJ472	Chip, 4.7k $\Omega$ 1/10W	
R909	ERJ6GEYJ472	Chip, 4.7k $\Omega$ 1/10W	
CONNECTOR			
CN901	K1KA15A00095	Connector, 15P	
COIL			
L901	YELTBLM21A10	Coil	
SWITCHES			
SW901	K0F111A00336	Switch	
SW902	K0F111A00336	Switch	
LAMPS			
PL901	YEALSRM0007	Lamp	
PL902	YEALSRM0007	Lamp	
PL903	YEALSRM0007	Lamp	
LCD			
LCD901	L5ADAHB00002	LCD	

Ref. No.	Part No.	Part Name & Description	Remarks
MECHANICAL PARTS			
MISCELLANEOUS			
1	YEFR07128	Rubber Contact	
2	YEFK06925	LCD Holder	
3	YEFV021768	Optical Shade	
4	YEFX0012070A	LCD Transparent Plate	
5	YEFV021743	LCD Optical Shade	
6	YEFA131528	LCD Case	
7	YEFA131527	Rear Case	
8	YEP0PT8901C0	Display PCB w/Component	RTL
9	YEFX0052351	Spring, MD	
10	YEFX0021396	Dust Cover	
11	YEFV021778	Optical Shade	
12	YEFX0012069	Transparent Plate	
13	YEFK028096A	Escutcheon Ass'y	
14	YEFE137847	Display Button	
15	YEFE137848	Eject Button	
16	YEFX0012068	Button Holder	
17	YEFV021744	Button Holder Shade	
18	YEFV021745	Button Holder Shade	
19	YEFV021733	Button Holder Pad	
20	YEFV012135	Insulator	
21	YEFV021412	Display Button Optical Shade	
22	YEFV021845	Eject Button Optical Shade	
51	XTB2+6GFX	Screw, 2x6	

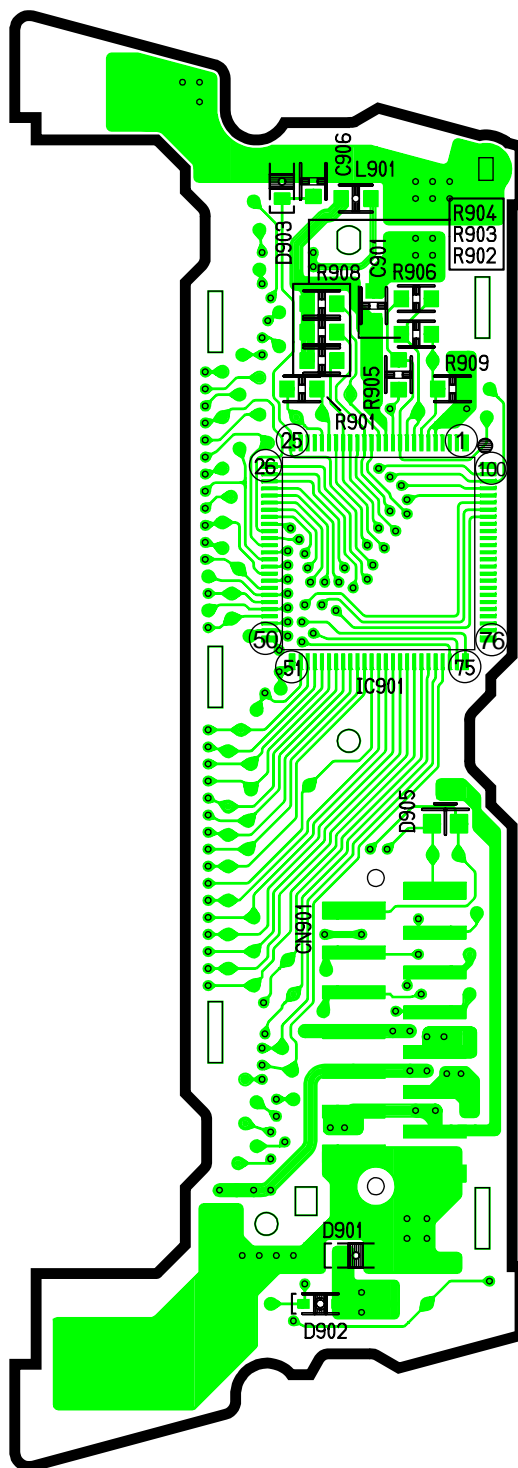
# 6 EXPLODED VIEW (Unit)



# 7 WIRING DIAGRAM



[E-8901A][Top View]



[E-8901A][Bottom View]

CA-DM1390F DISPLAY P.C.B

